



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 10/521,102      | 01/11/2005  | Robert A. Grigsby JR. | 81,603              | 7053             |

7590 07/13/2007  
Huntsman Corporation  
Legal Department  
10003 Woodloch Forest Drive  
The Woodlands, TX 77380

|          |
|----------|
| EXAMINER |
|----------|

MARCHESCHI, MICHAEL A

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1755

|           |               |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

07/13/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                   |                                |  |
|------------------------------|-----------------------------------|--------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/521,102     | Applicant(s)<br>GRIGSBY ET AL. |  |
|                              | Examiner<br>Michael A. Marcheschi | Art Unit<br>1755               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1755

~~The following is a quotation of the first paragraph of 35 U.S.C. 112:~~

Claims 9, 10, 14, 16 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9 and 14 are indefinite because the examiner is unclear as to what is meant by "derived".

Claims 10 and 16 are indefinite because the use of a trademark or tradename in a claim renders the claim indefinite. See Ex parte Davis 80 USPQ 448 (PO BdPatApp 1949); Ex parte Kattwinkel 12 USPQ 11 (PO BdPatApp 1931) ; and Ex parte Simpson 218 USPQ 1020.

Claim 20 is indefinite because 'said trimer catalyst' lacks antecedent basis.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 1755

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as obvious over Soukup et al.

(4,710,521) in view of Savoca et al. (5,238,894).

Soukup et al. teaches in the abstract, column 5, lines 20-29, column 6, line 36, column 8, lines 48+ and claim 5, a catalyst for making polyisocyanurate (from isocyanate and polyol) comprising a tertiary amine, a blowing agent and a trimer catalyst (alkali salt of carboxylic acid). This reference is silent with respect to the claimed specific amine component.

Savoca et al. teaches in column 5, lines 1-68 that a tertiary amine, similar to the claimed amine of the present invention, is a conventional tertiary amine in catalysts used to make polyisocyanurate foams. The reference also teaches that the catalyst component (tertiary amine, similar to the claimed amine of the present invention) can be combined with other tertiary amines (i.e. triethylenediamine) and organotin compounds.

As defined above, Soukup et al. is silent with respect to the claimed specific amine component. However, a prima facie case of obviousness may be made when chemical compounds have very close structural similarities and similar utilities. "An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." In re Payne, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979). See In re Papesch, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) (discussed in more detail below) and In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991) (discussed below and in MPEP

Art Unit: 1755

2144) for an extensive review of the case law pertaining to obviousness based on close structural similarity of chemical compounds. See also MPEP 2144.08, paragraph II.A.4.(c).

The prior art appears to disclose the invention as claimed on the basis of inherent property characteristics which render the claimed product obvious and the methods of contacting similar materials are also disclosed, therefore it would have been obvious to one of ordinary skill in the art to substitute a newly synthesized amine compound for one of the known compounds currently on the market in order to see if an improvement may be found over those of the prior art product.

Claims 1-17 and 19-20 are rejected under 35 U.S.C. 103(a) as obvious over Soukup et al. (4,710,521) in view of applicants own admission of page 1, lines 14-16 of the specification.

Applicants admit that that the claimed amine is known in the manufacture of polyurethane based (i.e. polyisocyanurate) foam products.

As defined above, Soukup et al. is silent with respect to the claimed specific amine component. However, it is prima facie obvious to substitute one known amine for another that is to be used for the same purpose (making polyisocyanurate foam products).

Claims 18 is rejected under 35 U.S.C. 102(b or e) as <sup>anticipated by</sup> ~~obvious over~~ applicants own admission of page 1, lines 14-16 of the specification.

The claimed invention is anticipated by applicants admission because said admission established that the claimed amine is known in polyisocyanurate foams.

Art Unit: 1755

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

This action is not made final due to the new indefinite rejections above.

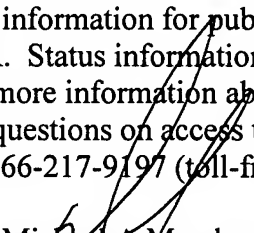
The references cited on 1449 dated 1/11/05 and search report have been reviewed by the examiner and are considered to be art of interest since they are cumulative to or less than the art relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7/06  
MM

  
Michael A. Marcheschi  
Primary Examiner  
Art Unit 1755